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ABSTRACT

The number of people who are living past age 65 is increasing dramatically. Although few stereotypes or generalizations apply to this population, older citizens still suffer from a societal attitude of agism. Studies on aging have demonstrated that chronological age does not predict physical condition or behavior. In fact, the current generation of older Americans are better educated, more economically independent, and are in better health than any previous generation. However, studies have shown that older citizens are concerned about their safety, identity, stimulation, transportation, and physical exercise. Research has found lifestyle to be the best correlate of health, exercise, and vigor. The Alliance Committee on Aging, begun in 1974, is devoted to expanding and initiating professional preparation programs in health, physical education, recreation, and dance for service to the older population. Emphasis is placed on human movement, values, and stress management as life enhancing goals for older citizens. The Alliance publishes program directories and is instrumental in advocating guidelines, standards, and professional certification. (Guidelines for Exercise Programs for Older Persons is appended.) (BL)

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AGING AND HEALTH — CHANGING LIFE-STYLES

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Paper presented at the Annual Meeting of the National Council on Aging, Detroit, MI, March 13-16, 1983.

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EXERCISE PRESCRIPTION

Three Times A Week For Sixty Minutes

"To regain and maintain man's natural suppleness, strength and agility, so that these powers may have an opportunity of developing bodily beauty, harmony, and effective purposeful action. Skeletal stiffness should give way to mobility, weakness of musculature to strength, and awkwardess to agility." (Neils Bukh)

I Warm-up-----Reality Orientation
Introductions
Rhythm, Direction, Space

II Breathing

III Relaxation

IV Swedish Pensioner's Program #1
For the least able
more able
Active and vigorous

V Creating Individual Patterns
Changing Leaders

VI Adapted Dances
Three Levels

VII Cool Down and Socialization

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AGING AND HEALTH -- CHANGING LIFE-STYLES

The federal government needs our assistance in sensitizing a total population to a changed society where forty million aged, plus the infants to sixteen year olds, will need to be largely cared for, nurtured and supported by an increasingly older work force. Professor and researcher, Matilda White Riley, of the National Institute on Aging, says "The bottom line is to understand the nature of aging so people can live more quality lives." (1)

Gerontology, the study of the phenomena connected with aging, has been developed in this century to meet the needs of increasing numbers of older persons. The goal "is not to extend life but to alleviate some of the personal, social, economic and physical problems that afflict older citizens." (2) The multidisciplinary study of gerontology is a fairly recent development in the United States. (2) Prior to a first visit to Sweden in 1968, little awareness had been visible on the college campus. Today, the most recent new course work has been in Death and Dying and Gerontology, which is sometimes rostered as Aging Studies. Continuing Education, Senior Centers, Elderhostel, or some sort of vacation college for the elderly, counseling for career changes, and pre-retirement seminars are in vogue. Most colleges and universities are experiencing an older student population where one-third of those registered may be thirty plus years of age. Free tuition programs for senior citizens are common. The concept of retiring to something and the handling of the issue of disengagement versus continued active participation is important.

Growing old is a universal and a world wide phenomena. Through the centuries there have always been some few individuals who have lived to an advanced age, but it is only in the twentieth century that there has been a dramatic increase in the number of older persons. Today, eleven percent plus of the Americans are sixty-five and older. By year two thousand that number will swell to 30.6 million or one in eight persons. Further-

more, the greatest increase in the older population is among the high risk, frail edlerly who are seventy-four or older. (3)

According to a United Nations report, the number of persons in the world who are sixty or older will double during the thirty-five year span between 1970 and 2000. (4) The Abkhasians in Georgia of the Soviet Union refer to their older citizens as "Longer Living." In Sweden they are the "Pensioners." Longevity rates vary among the nations and appear to be the result of life styles.

Older persons suffer from a contagious disease found in no medical dictionary. It is an attitude called agism. Like racism and sexism, it is a collection of erroneous beliefs and attitudes concerning a mythical and stereotyped older person--sick, sad, tired, dirty, ugly and of no use to self or others. The American society is just beginning to learn that growing old is not a malediction everywhere in the world. Attitudinal change can help us meet the challenge to make the increase in years more enriching for the future.

One of the problems we face in the United States is a reluctance to contemplate our own aging. Although we are aware that humans are the only species who know they will age and die, we tend to avoid discussions and serious study. Considering the alternative, aging successfully, surviving and being sensitized to one's aging process should be most desirable.

The terms, older, elderly, and senior citizen, must be qualified. Overnight, every night, five thousand Americans reach statuatory senility. Our government has arbitrarily accepted age sixty-five for purposes of social security even though we know this was the age specified by Bismark in the late 1800's in Germany. In our society we might classify persons aged fifty to sixty the very young olds, sixty-one to seventy the middle aged olds, seventy-one to eighty the very old olds, and the eighty-years-on as centurians--then again, there are the frail olds, the able olds and the vigorous olds! No two olds are alike!

Chronological age is no predictor of physical condition or behavior. There is no such thing as an old age personality. We grow more unique as we grow older and there is greater diversity at this age than in any other age group. We age the way we live. There is a remarkable continuity of character and life styles. Old age is not a sudden and dramatic event but merely another life cycle transition. We are all familiar with the Erickson Developmental Stages. Neugarten and associates developed a life cycle chart which shows forty-five to sixty years as a late adult in a comfortable period of life with mastery and competence. The sixty plus period is an evaluative stage. The task is to put one's life in perspective, to cope with accumulating losses, to develop a sense of ego integrity--in short--to become one's self. (5)

A longitudinal study at Duke University showed that far from conforming to any depressing stereotype of decline, the vast majority of older people remained in good health, socially and sexually active, with reasonable financial security and good mental acuity until the final weeks of life.(6) They have an enormous store of unused potential for contributing to contemporary society. Only two to five percent are in need of custodial care and are institutionalized at any given time. The rest of the aging population are fairly healthy and capable of independent living. Even though some have chronic illnesses they are able to live active and involved lives.

They live, for the most part, in single family dwellings in their community, in senior citizen housing, in leisure town houses, condominiums, trailer parks and resort settings. They travel a great deal, as long as they are able, and those who have funds follow the sun. According to 1978 census figures the median school years completed for those over fifty-five years of age was 11.8. Blacks have a median of eight years of education. All have lived through wars and depressions and great technological development. There are more women than men in the aging population. Twenty percent of American

women are without husbands by age sixty. At age seventy-five there are fifty-eight males for every one hundred females.

Most of the aged are not poor. Many are retired completely and live on fixed incomes so that a serious illness would wipe out life savings and destroy security. Widows who have never worked outside the home have a difficult time. Rising property tax and maintenance costs may force change of residence. Presently there are not enough alternatives for senior housing. Old and poor is triple jeopardy! The aged poor have more health problems and comprise thirty percent of the resident population in public mental hospitals. Twenty-five percent of all suicides are persons over sixty-five. "There are distinct problems in reaching and involving low income and minority older persons." (7)

Results of a retirement study by Irelan and Bond for Social Security Administration (8) suggests that the current group of retirees may be the beginning of a change in the characteristics of the American aged population. They are better educated, have fewer children, are more used to leisure due to changes in the workplace, and women are more likely to have worked outside the home. This could mean increased pension checks. They realize that health can decisively affect activity and morale. Forty-one percent said they were as healthy as most others, twenty percent said they were worse than most, three-fifths are free of disabling conditions, yet one-quarter were putting off some necessary medical care and less than one-half have had semi-annual dental visits.

Havighurst says the elderly have three pressing needs: safety, identity, and stimulation. They fear violence and crime. Transportation is a major problem and Sunday is the most difficult day of the week. The fears and anxieties about possible future health difficulties are greater than the actual state of health and well-being.

The Physical Fitness Research Digest published by The President's Council on Physical Fitness and Sport in April 1977 (9) reported a survey which showed only

thirty-nine percent of Americans aged sixty and over got any systematic exercise. The favorite form is walking, which is practiced by forty-six percent of the men and thirty-three percent of the women who exercised. Few older people engaged in any more vigorous forms of exercise. Only fifty percent of the elderly know how to swim and four percent swim regularly. Six percent of those who exercise use calesthenics, three percent bicycle, one percent jog and one percent, men only, do weight lifting. Basic to the problem are attitudes toward exercise and fitness. Conrad believes: "They vastly exaggerate the risks involved in vigorous exercise after middle age; they believe their needs for exercise diminish and eventually disappear as they grow older; they over-rate the benefits of light and sporatic exercise, and they under-rate their own abilities and capacities." (10) From their response to the survey questions these individuals did not have good physical education and athletic experiences when young and are not informed about the contributions that physical fitness can make to their personal health, independent performance and appearance. This is an inditement of our profession! We now have a second chance.

Saxon and Etten in Physical Change and Aging: a Guide for the Helping Professions (11), list eight biological theories for the aging process. "No one knows exactly how or why aging occurs, although numerous theories have been proposed. No one theory is currently acceptable as an adequate explanation. Much of the available research involves subhuman species and cannot be generalized." Aging is thought to begin before birth. According to the Hayflick Genetic Factors Theory (12), life span is determined by a fixed program in the genes of body cells, and is fixed from species to species; in humans it is estimated to be approximately 110 to 115 years. Few live out their potential. The best single thing one can do is to be born of long living parents. We do know that there is no disease produced solely by the passage of time and that diseases of aging and degeneration can strike at any age.

Harold Elrick, M.D., et al, in Living Longer and Better (13), states that "the degree of health and vigor, the avoidance of disease, and the longevity we achieve are almost entirely determined by what we do each day of our lives, i.e., our life-style." He believes in prevention rather than treatment. This is a basic program of fitness and wellness which includes the whole person concept. Elrick has studied other cultures in which life expectancy is longer than in the United States. He found the typical U.S. diet to be excessively high in cholesterol, animal fats, refined sugar, salt, protein and calories and too low in fiber and calcium. The emphasis on being a "good" eater (big) is deeply ingrained. Our inability to remain active as we grow older, our addiction to alcohol and our reliance on drugs, smoking, and our attitude toward tensions and anxiety lead us away from optimal health, vigor and the longevity of our hereditary potential.

Christopher Hollowell in "Fit and Fine at 109" (Dial, February 1982) (14), states that "lonliness is aging's best ally." His recipe includes: not smoking, exercising hard, sleeping long enough, avoiding fats and salt, eating breakfast, speaking out rather than bottling stress, talking to a number of friends each day, drinking one or two glasses of wine a day. "Wine helps digestion, lessens the chance of a heart attack and paves the way for relaxed social interaction."

Recent pilot studies in Maryland and Texas sponsored by the National Association for Human Development show a startling difference between active and inactive seniors. There is an increase in vitality, less dependence on laxatives, fewer visits to the physician, and improved general functioning through a program of basic flexibility exercises. (15)

According to Herbert deVries, Research Physiologist, Andrus Foundation, University of Southern California, we now have proof that life style is most important. "Not what the doctor can do for us but what we can do for ourselves." His studies (16)

prove that we have to live right if we want to live long and well. We must sleep at least eight hours, eat breakfast, stop smoking, maintain normal weight, relax, use alcohol in moderation and exercise. We now control a piece of our destiny.

As to the trainability of the older organism--researchers in Japan and elsewhere had said there was no use if we had not become fit by age forty-five. deVries, et al., in a study at Laguna Retirement Center (17), discovered he could get results with a group whose median age was sixty-nine and one-half years. Weight was controlled through loss of body fat without dietary intervention, there was improved aerobic capacity, breath capacity and vital capacity. Older people with a mean age of seventy can get to the oxygen intake of persons with a mean age of thirty years. In a subsequent study with women there were very significant training results but no large change in ventilating capacity. Women were found to have more joint flexibility. It is interesting to note that we do not have to work older people as hard or to as high intensity for the training effect.

deVries attempted to explore euphoria, or sense of well being. We spend over one billion dollars a year for drugs that have serious side effects. Will exercise serve as a tranquilizer or relaxer? His study used the popular drug Milltown with exercise and a control group on placebo and exercise. The control group improved in relaxation immediately; the result was still present after thirty minutes and there was proof that the result lasted longer than one hour after exercise. (18)

deVries concludes that all of the important factors that lead to good health are under our control. We must accept the responsibility. To begin an exercise program, start with a medical examination, warm up slowly, exercise systematically, cool down carefully. For the arthritic there were dynamic joint mobility changes, Water exercise is excellent therapy as it relieves the stress of weight bearing. It was exciting to see the great improvement which was both physical and mental.

In testimony before the Senate Subcommittee on Aging (19) deVries stated,

"In view of the many benefits likely to result from the improvement of physical fitness in the elderly, it seems desirable to begin the implementation of programs of (1) exercise (2) nutrition and (3) stress reduction or relaxation procedures. However, training of older people in these areas requires instructors with highly specialized preparation and skills. At the present time, it is this resource that is lacking." In the hearings, he and others sounded the call for professional preparation in working with older adults in programs of health, fitness and leisure services.

The American Alliance for Health, Physical Education, Recreation and Dance is a voluntary educational organization made up of seven national and six district associations with fifty-four state and territorial affiliates. The more than 45,000 Alliance members are health and physical educators, coaches and athletic directors, and professional personnel in safety, recreation, leisure education and dance. AAHPERD is an unbrella for a number of allied disciplines and specialities within disciplines. (UPDATE, April 1979) (20). The Alliance Committee on Aging was first appointed in 1974 and is devoted to expanding and initiating professional preparation programs which include training for service to the older population. In fact, we believe that many of the experts already in our profession are updating their present knowledge and applying their specialities to gerontology.

Over the years health educators, physical educators, coaches, dancers and choreographers, therapists and leisure and recreation specialists have proposed many purposes for human movement to accomplish their goals (Weston, 1962). (21) Such natural movements as walking, running, jumping, were first defined by Guts Muth (Germany, 1759-1830). This so-called nutural system was further developed in Denmark and Great Britain. In Sweden Per Hendrik Ling (1776-1833) gave movement an anatomical direction when he developed medical gymnastics for sick and well people which required all muscles and joints to be exercised in each lesson in a set order. Neils Bukh

(1880-1950) in Denmark saw the aim "to regain and maintain man's natural suppleness, strength and agility, so that these powers may have an opportunity of developing bodily beauty, harmony, and effective purposeful action Skeletal stiffness should give way to mobility, weakness of the musculature to strength, and awkwardness to agility." (Weston, 1962)

Muska Mosston (1965) (22) describes three categories of values. The assigned value belongs to the dancers and choreographers who attribute a feeling, an idea or a mood to a movement. Functional value is in the domain of the coach where specific movements are required for particular sport skills. The intrinsic value of movement is concerned with the intentional development of physical attributes or components required to develop and maintain a healthy mind and body. It would appear that, for the purposes of the elderly, all three goals would be appropriate, but basic to successful aging would be an understanding of the components of total fitness, the intrinsic value, which is often the difference between remaining independent or becoming dependent.

Ideally, preparation for a fit old age should begin in youth in order that maximum benefits may accrue. When such preparation has not occurred, we now know that the concept of trainability, even in old age, is valid. Exercise is not necessarily to prolong life but rather to increase the years of feeling good. "To be alive as long as you live!" (23)

Model programs for older citizens can be arranged to fit the needs of the least able, sitting in chairs; the more able, moving around a strong base of support; and the most able who can move freely through space. Programs should be sequential and progressive and should be provided at least three times a week for sixty minutes to provide the most desirable results.

The public health model suggests that one either adapts to the stresses of life or becomes exhausted! Positive response to stress might be brought about by

mediating variables, such as HPERD services, programs and activities. These mediating variables provide both physical fitness and socialization which not only reduce anxiety, tension and depression, but can serve as prevention, intervention, and post-vention, or rehabilitation for the older population.

The AAHPERD grant proposal, MODEL EDUCATION AND SERVICE APPROACHES IN HEALTH, FITNESS AND LEISURE FOR OLDER AMERICANS, was funded by AOA for a two year period. A series of seven workshops were presented at strategically located spots. A 16mm sound and color film, "Health, Fitness and Leisure for a Quality Life," was developed as part of the grant. It promotes lifelong activity, develops concepts of fitness and shows the various settings in which health, physical education, dance and leisure personnel can serve older adults. The aim is to motivate decision makers to incorporate health, fitness and leisure services in programs for the elderly. The final outcome of the AOA grant was the publication of two manuals: Health, Physical Education, Recreation and Dance for the Older Adult: A Modular Approach, by Dan Levitan and Linda Campanelli (1980); and Service-Learning, by Robert Beland (1980). These manuals (25, 26) provide the profession with the HPERD gerontological approach and delineate guidelines for program development. Other program materials have been developed by Alliance members and are available through AAHPERD Publications.

The AAHPERD Committee on Aging worked cooperatively under a grant from the New Jersey Office on Aging to sponsor three workshops for personnel in long term care facilities. These workshops were designed to serve as models for other states so that AAHPERD members were encouraged to become involved with training for the maintenance of programs in nursing homes and senior centers.

AAHPERD co-sponsored the publication of a Directory of Programs in Physical Fitness for the Elderly, listing institutions and persons to contact. For further information write Leslie Lyons at North Country Community College in Saranac Lake, New York 12983 (27).

Our Alliance has become affiliated with gerontological societies, The Association for Gerontology in Higher Education, The National Council on the Aging (NCOA) and National Volunteer Organizations for Independent Living of the Aged (NVOILA). We believe we can safely say that an entire professional group has become more aware of the needs of an older population with relation to exercise and that a large number of interesting and varied programs serving the older citizen are in operation in and around college and university centers throughout the nation.

Professional preparation is moving forward, materials and guidelines are available, but further progress and widespread implementation in service for the older population will be dependent on the solution of two important problems.

First, many AAHPERD educators are hesitating in the development of exercise programs in long-term care facilities as well as in the community at large because of not knowing how far to go with the elderly in physical exercise intensity. Research in this area is far from conclusive. Some practitioners feel that seniors are the best judge of their own physical capacity and that they will be turned away if we require a physical examination since prevention is not covered by Medicare. A policy statement on "Guidelines for Exercise Programs for Older Persons (age 50 and older)" was developed by a sub-committee of the AAHPERD Committee on Aging and approved by the AAHPERD Board of Governors in fall, 1981. (28) The policy statement recommends: for programs involving strenuous exercise (that elevate heart rate more than 100 beats per minute) participants must have a medical evaluation under the supervision of a physician; for low intensity exercises, the personal physician's approval should be required; heart rate must be monitored periodically during exercise; and the exercise leader should have cardiac-pulmonary-resuscitation training and a well defined emergency plan. More specific research in exercise physiology along with a cornucopia of exercise prescribed for three levels of intensity will allow for further program development.

The second problem is one of job descriptions and competencies needed for working with the elderly in exercise programs. Presently, there are no standards and the only civil service job classification is that of Activity Director. This individual can be a para-professional who is responsible for a number of support services. A representative of AOA, when questioned about this problem wrote, "While it is necessary to employ leaders who have an understanding of the benefits of physical activity and the degree to which it is beneficial, an oversell of the need for a professional background may be hurting the movement toward increased physical activity." He goes on to suggest working through Activity Directors, RSVP volunteers, rotating leadership among the group, and devising low-level activity programs.

It would appear that there is something wrong with a society which requires teaching certificates and degrees for the education of children and youth but sets few standards for teaching the older population. We cannot afford to wait for the necessary legislation for adequate funding and trained personnel, but must continue to provide programs of activity for senior citizens with varied physical capacities. Perhaps the best we can do is to suggest that Direct Service Personnel call upon the professionally trained health and physical educators, recreation teachers and dancers, at the local level to volunteer and share their expertise as consultants and trainers. Hopefully, some of the RSVP volunteers might be our own trained professionals. Legislative know-how and extensive lobbying will be required for the long-term solution to this problem.

The challenge is one we cannot fail to meet. The aged are sensitive barometers of how well a society handles the basic problems of living. Polarization of the generations must be avoided, new specialities can be developed and greater understanding and sensitivity will grow among the young while those who are aging can utilize education for the necessary adaptation to new life styles, better health and more joy in living.

REFERENCES

1. Riley and Foner. Aging and Society, Vol. 1. New York: Russell Sage, 1968.

2. Schwartz, Arthur and Peterson, James. Introduction to Gerontology. New York: Holt, Rinehart and Winston, 1979. pp275-288.

3. U.S. Department of Health, Education and Welfare. Facts about Older Americans. Washington: DHEW Publication #OHDS, 79-20006, 1978.

4. United Nations. The Aging: Trends and Policies. New York: United Nations, Department of Economic and Social Affairs, 1975.

5. Neugarten, Bernice. "A Development View of Adult Personality" in Janes E. Birren (ed.), Relations of Development and Aging. Springfield, Ill: Charles C. Thomas, 1964. pp176-208.

6. Palmore, Erdman. Social Patterns in Normal Aging; Findings from the Duke University Longitudinal Studies. Durham, North Carolina: Duke University Press, 1981. 150pp.

7. Missouri Division of Aging. The Minority Aged: Surviving The 80's. Missouri, Lincoln University, Jefferson City, Mini-White House Conference Proceedings. April 1981.

8. Irelan, Lola M., and Bond, Kathleen. "Retirees of the 1970's" in Osterlaind, C. (ed.), Migration and Mobility and Aging. Gainesville: University of Florida Press, 1974.

9. President's Council on Physical Fitness and Sport. Physical Fitness Research Digest. Washington, D.C.: Ser. 7, No. 2, April 1977.

10. Conrad, Casey. op.cit.

11. Saxon, Sue and Etten, M. J. Physical Change and Aging. New York: Tiresias Press, 1978.

12. Hayflick, Leonard. "The Cellular Basis for Biological Aging" in Finch, C. and Hayflick, L. (eds.), Handbook of the Biology of Aging. New York: Van Nostrand, Rinehold Co., 1977.

13. Elrick, Harold, M.D. Living Longer and Better. Mountain View, California: World Publications, 1978.

14. Hallowell, Christopher. "Fit and Fine at 109." The Dial. New York: Public Broadcasting Commission, February 1982. p16.

15. National Association for Human Development (NAHD). Basic Exercises for People over Fifty. Washington, D.C., 1976.

16. deVries, H. A. "Physiology of Exercise and Aging," Chapter 12 in Woodruff, D. S. and Birren, J. E., Concepts and Issues in Gerontology. New York: Van Nostrand, 1975.

17. deVries, H. A. "Physiological Effects of an Exercise Training Regimen upon Men Aged 52-88." Journal of Gerontology, 25: 325-326, 1970.

18. deVries, H. A. and Adams, G. "Electromyographic Comparison of Single Doses of Exercise and Meprobromate as to Effects on Muscular Relaxation." American Journal of Physical Medicine, 51, No. 3, 1972. p130.

19. deVries, Herbert. "Testimony before Senate Sub-committee on Aging. March 3, 1976, p718, 55-648, 0-75-46.

20. AAHPERD. UPDATE. Washington, D.C.: April 1979. p1.

21. Westen, A. The Making of American Physical Education. New York: Appleton-Century, 1952.

22. Mosston, Muska. Development Movement. Columbus, Ohio: Charles E. Merrill, 1965.

23. Frankel, Lawrence. Be Alive as Long as You Live. Charleston, West Virginia: Preventicare, Frankel Foundation, 1977.

24. NEA Sound Studios. "Health, Fitness and Leisure for a Quality Life." Washington, D.C. 16mm. film, sound and color, 20 min.

25. Leviton, Dan and Campanelli Santoro, Linda. Health, Physical Education, Recreation and Dance for the Older Adult: A Modular Approach. Reston, Va: AAHPERD, 1980.

26. Beland, Robert. Service-Learning. Reston, Va: AAHPERD, 1980.

27. North Country Center of Gerontology and AAHPERD. A National Directory of Physical Fitness Programs for Older Adults. Saranac Lake, New York: 1980.

28. AAHPERD, UPDATE. Reston, Va: December 1981, p3.

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Guidelines for Exercise Programs for Older Persons (Age 50 and Older)

There can be risk in sudden, unregulated and injudicious use of exercise. However, the risk can be minimized through proper preliminary screening and individualized prescribing of exercise programs. It is important for older persons entering an exercise program to have a medical evaluation by a physician knowledgeable about physical exercise and its implications.

For programs involving vigorous exercises (i.e. exercises that exceed the level of intensity encountered in normal daily activities such as walking and climbing stairs), the medical evaluation should insure that the individual can participate in vigorous exercise without any undue risk to the cardiovascular and other bodily systems. Normally, a test that ascertains an individual's cardio-respiratory adjustment to the stress of exercise is an advisable part of the examination. Minimally, it would ascertain if the cardiovascular system, by such appropriate indicators as heart rate and blood pressure, can adequately adjust to vigorous exercise.

For exercise programs involving low intensity exercises (i.e. exercises that do not exceed the level of intensity encountered in normal daily activities), participants should have their personal physican's approval.

Regardless of whether or not a program of exercises is vigorous or of low intensity, the following guidelines to insure the safety of the participants are offered:

(1) In that each person's response to the stress of exercise is specific to that individual, it is important that each person's response to exercise be monitored periodically for signs of undue stress (unduly high heart rate, nausea, dyspnea, pallor, pain). Participants should be taught to monitor their own heart rate and to recognize these indicators of stress. Unusual responses should be reported to the exercise leader immediately. Exercise leaders, also, should be vigilent of these warning signs.

(2) Every exercise program must have a well-defined emergency plan for exercise leaders to follow in the event of cardiac arrest or other accidents.

(3) Exercise programs must have adequate supervision. Exercise leaders should be trained in Cardio-Pulmonary-Resuscitation (C-P-R) Techniques. At the very minimum, CPR trained personnel should be present during every exercise session or in close proximity to the exercise program.

Approved: Alliance Committe on Aging, 4/14/81, Boston, MA; Alliance Board of Governors, 10/4/81, Reston, VA.

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